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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/764,380 | 01/22/2004 | Cheng Youn Lu | 21676-07366 | 1505 |
| 758 | 7590 | 08/16/2004 | EXAMINER | |
| FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041 | | | RODRIGUEZ, ARMANDO | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2828 | |

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/764,380 | LU, CHENG YOUN |
| | Examiner | Art Unit |
| | ARMANDO RODRIGUEZ | 2828 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6,11,12 and 17 is/are rejected.
- 7) Claim(s) 7-10 and 13-16 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-22-2004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the claims recites a logic coupled to a first integrator and also recites a logic coupled to a block and a second integrator, which have separate circuits thereby a gap between these circuits has been established.

Regarding claim 1,

In line 10, applicant has recited a “previous measurement” but has failed to recite any means to obtain such a measurement and raises the question of: How is the previous measurement obtained?

Regarding claim 1,

It is well known that logic pertains to dealing with truth or falsity of statements implemented by hardware such as AND,NAND,NOR, OR, etc., therefore the use of

“logic” within the claim does not define the necessary structure to obtain the recited functions of determining power or absolute values, therefore the claim is indefinite.

Regarding claim 1,

The claim has failed to define the nonlinear estimation reference constant, which raises the questions: Is the adjustment time, current, phase, etc.? What is the constant? The claim has been read in light of the specification, however the constant being critical to the claim to obtain the absolute value of the current.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5,6,11,12 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Miremadi (US 2004/0131094).

Regarding claims 5,6,11 and 12,

Figure 3 illustrates a dual loop control circuit for controlling the extinction ratio during modulation of the laser having a laser diode (10), an automatic power control (APC) loop (16), a monitoring diode (12), a digital-to-analog converter (20) and a controller (24), as described in paragraph [0020] to [0025]. In figure 2 the operation of the control circuit of figure 3 is illustrated, where the circuit determines all of the required

variables to determine the extinction ratio of the laser as illustrated the efficiency is determined by the values of P_{avg1} , P_{avg2} and Bias1, Bias2, as described in paragraph [0025] to [0029].

Regarding claim 17,

Paragraph [0027] describes the control circuit as performing a linear algebraic calculation for the slope (m) to obtain the operation efficiency.

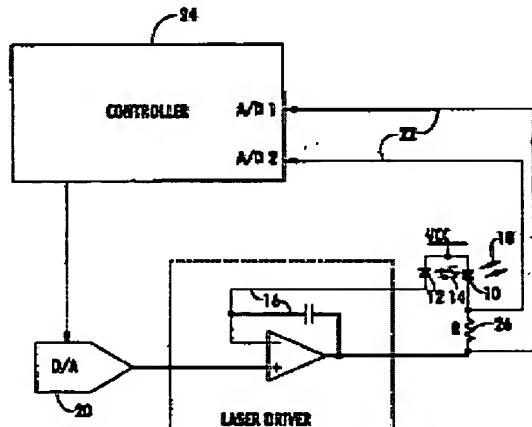
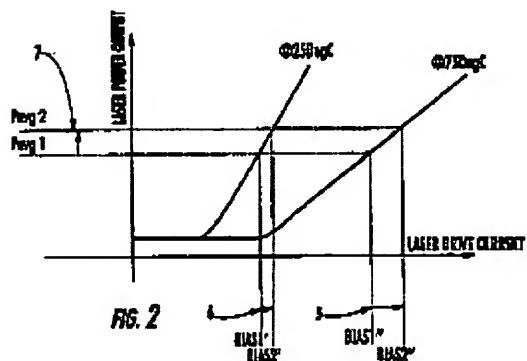


FIG. 3



Allowable Subject Matter

Claims 1-4 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 7-10,13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 7-9 and 13-15,

None of the cited prior arts alone or in combination discloses the recited limitations of dependent claim 7, having in particular the combination of both recited limitations, which provide integrating the measurement output power values and integrating the absolute power values.

Regarding claims 10 and 16,

None of the cited prior arts alone or in combination discloses the recited limitations of dependent claim 10, having in particular the combination of both recited limitations, which provide integrating the variation of the measured output power and integrating the variation in the extinction ratio.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARMANDO RODRIGUEZ whose telephone number is 571-272-1952. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARMANDO RODRIGUEZ
Examiner
Art Unit 2828


MINSUN HARVEY
Supervisor
Art Unit 2828

AR/MH